



Corporate Environmental Accounting: Issues and Challenges in India

Dr. Kishor S. Bhosale

Assistant Professor,
B.M.C.C. Pune.41004.

Abstract:

Today, World is facing the twin problem of promoting economic development and protecting the environment. There is need for proper balance between environmental protection and sustainable and economic development. It is observed that, many efforts have been done to develop a mechanism of incorporating environmental information with national income to compute economic development. But without the proper environmental accounting data, both in the corporate level and the Government, it next to impossible to determine whether anybody have fulfilling their responsibilities towards the environment. The implementation of Environmental Accounting can help the goals of corporate and other stakeholders in reducing the costs and decreasing the pollution. This study attempts to address the development of corporate environmental accounting and the problems associated with that. This study identifies the development of the corporate environmental accounting adopted by the sample companies in India.

Key words: Environment, Environmental Cost, Development, Environmental Accounting

Introduction:

Environment is becoming a much more urgent economic, social, and political problem all over the world. The industrial activities are directly or indirectly responsible for various environmental problems such as natural calamities, pollution of water, air, noise etc. Environmental Accounting is to bring environmental costs to the attention of corporate stakeholders. The implementation of environmental accounting can help to achieve the objectives of the corporate and their stakeholders in reducing the costs and decreasing the pollution respectively. The main objective of the environmental accounting is to encourage sustainable economic development by improving the knowledge and understanding of the interactions between environment and the economy. Environmental Accounting is the treatment of various environmental issues. In the annual report of the company, it includes the environmental expenditures, actual determination and recognition of the environmental liabilities etc. Today the modern business approaches like Total Quality Management, Life Cycle Designing, assessment and costing provides the platform for the environmental business decisions. Generally the companies are disclose the following information in their Annual Report-

- Pollution prevention and control
- Current environmental costs
- Estimates of future environmental costs and their benefits
- Data related to reduction of waste

There is no standard definition of environmental accounting. It includes financial accounting, reporting, auditing and environmental management accounting.

Environmental Accounting may be defined, 'as the process of identification, measurement and allocation of environmental costs, identifying environmental liabilities and finally communicating to stakeholders'.

The United Nation has made an attempt by developing Integrating system of environmental Accounting, a Central multi-purpose conceptual framework that describes accounting of interactions between the economy and environment. Many countries try to incorporate environmental accounting data with national income to compute economic development.

The present study has been undertaken to find out the performance of companies regarding environmental accounting practices as specially engaged in production sectors in India. This paper has been containing following aspects-

Introduction

Review of Literature

Research Methodology
Practice of Corporate Environmental Accounting in India
Findings and Suggestions
Conclusion

Review of Literature:

Researcher had reviewed the past published data available from various publications- Protection of environment is an important issue before the Government. Very few studies have been conducted on environment accounting in India. Researcher has referred various books, journals, research papers, annual reports of selected companies and related websites to collect the data- Al-Tuwaijri[2003] analysed the relationship between environmental disclosure, environmental performance, and economic performance. Chatterjee and Mir [2008] analysed that, the status of environment disclosure made by top Indian companies in terms of market capitalisation and concluded that most of the information disclosed by the sampled companies was narrative. Sharma [2012] review that laws for environmental protection in India, need for environmental accounting and Indian scenario of environmental reporting and auditing. Gupta [2012] suggested that, accounting bodies should develop a separate conceptual framework for environmental accounting. Dr. Manoj Gosawami [2014] had attempted to address the development of corporate level environment accounting and the problems associated with that. C.K. Sonara and Ashav patel[2016] concluded that, for the successful environment accounting system should have a method for accounting for full environmental costs and benefits into cost allocation and benefited by complete integration of environmental cost and benefits in corporate decision making system.

Research Methodology:

This study is based on secondary data collected from books, research papers, periodicals, journals, selected company's annual report of year 2015-16 and related websites etc. To provide evidence on corporate environmental accounting, their issues and challenges of selected five Indian companies. For this purpose researcher has selected five manufactured based companies situated in India for the study. This paper presents a comparison of the annual report analysis of various corporate with regards to issues related to environment and raises challenges before accountants.

Objectives of the Study:

The objectives of the study can be highlighted in the following issues:-

1. To study the origin and review the status of the environmental accounting in the corporate sectors.
2. To know the environmental accounting issues and challenges before the corporate sectors.
3. To highlight the corporate environment accounting practices in this regards.
4. To find out the major obstacles in the sound development of environmental accounting.

Sample Design:

There are various aspects of scientific research. Researcher has selected top 5 Indian companies for the study from the different part of the country.

Selected five Companies:-

- Godrej Industries Ltd: Annual Report 2016
- Hindustan Unilever Ltd: Annual Report 2016
- Bharat Electronic Ltd: Annual Report 2016
- Nestle India Ltd: Annual Report 2016
- Havells India Ltd. Annual Report 2016

What is Environmental Accounting?

Today, an increasing number of companies and other organisation are engaging in environmental management as part of the management strategies to satisfy measures for dealing with environmental

issues and to internally carry out environmental conservation activities. An environmental activity is a tool to supplement environmental management.

Environmental Accounting data is not only used by the companies or other organisation internally but is also made public through disclosure in environmental report.

Environmental accounting is an important tool for understanding the role played by the natural environment in the economy. Environmental Accounts provides data that highlight both the contribution of natural resources to economic well-being and the cost imposed by pollution or resource degradation.

Environmental Accounting is referred to as “green accounting”. Recent years have witnessed rising concern of environmental degradation, which is taking place mainly in the form of pollution of various types of air, water, soil, sound, soil erosion, deforestation etc. A careful assessment of the benefits and costs of environmental damages is necessary to find the safe limits of environmental degradation and the required level of development.

Importance of Environmental Accounting:

Environmental Accounting is an important tool to measure the economic efficiency of environmental conservation activities and the environmental efficiency of business activities of companies as a whole. Business organisations are facing the challenges of determining their true profits which are environmentally sustainable ones. Environmental accounting for costs and benefits that arise from change to companies products and processes, where the change also involves environmental impact. Environmental accounting includes the identification and greater awareness of environment related costs providing the opportunity to find ways to reduce these costs for improving the environmental performance.

Environmental accounting is an effective tool for placing environmental issues before the management and providing useful information regarding environmental decision making

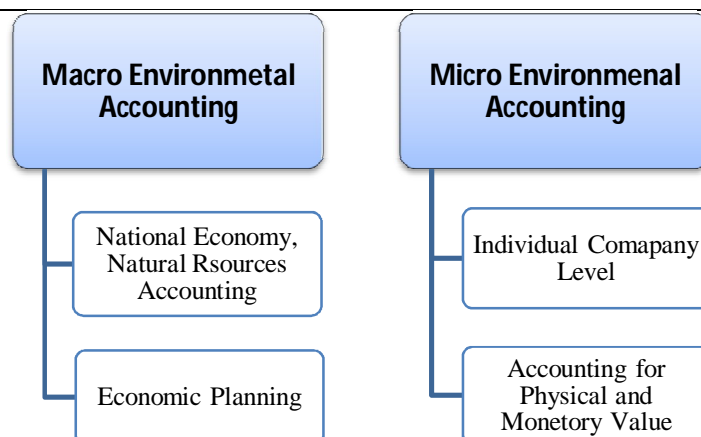
Need and Scope of Environmental accounting:

Environmental accounting helps to know whether a company has been discharging its responsibilities towards environment or not. Basically, a company has to fulfil the following environmental responsibilities-

1. Promoting a company having a wide environmental attitude.
2. Control over operational and material efficiency gains driven by the competitive global market.
3. Control over increases in costs for raw materials, waste management and potential liability.
4. Operating in a way that those environmental damages do not occur.
5. It helps to know whether corporation has been discharging its responsibilities towards environment or not

Environmental Accounting for any costs and benefits that arise from change to a firm's products and processes where the change also involves a change in environment. It has been noticed that, the environmental accounting is gaining importance at macro level to micro level. At the macro level National environment accounting focuses on accounting of natural resources and environmental costs and at micro level, it tries to assess the actual impact on corporate activities.

The scope of environmental accounting is very wide. It includes corporate level, National and International level.



Source: www.env.go.jp.in

Social costs and economic benefits:

Social cost is incurred in the process of production and remains unaccounted e.g. factory pollution of a nearby river and emitting of polluting gases are harmful to the society. The cost incurred on society can be measured, but remain unaccounted for. Social benefits include development of infrastructure facilities for its employees and local community. But these too remain unaccounted and don't appear in the national calculation. Environmental degradation, excess use of natural resources etc, are difficult to measure in terms of social costs and economic benefits. Cost of air pollution, water pollution cannot be measured properly and hence, it is difficult to incorporate such data into national account. Measuring environmental aspects in monetary terms is more important but practically is very less and lacks uniformity with regards to standards.

Economic Benefit associated with environmental conservation activities is the contribution to a company's economic profit as a result of progress made by implementing environmental conservation activities.

Benefits of Environmental Accounting:

1. Assessment of annual environmental costs or expenditures
2. Developing of environmental performance measures
3. Calculating costs and savings of environmental costs
4. Design and implementation of environmental management system
5. Budgeting and Business planning processes

Environmental Accounting consist the following elements:

- A] Environmental conservation Costs
- B] Environmental Conservation Benefit
- C] Economic Benefit Associated with Environmental Conservation Activities

Major Environmental Accounting issues and challenges before the corporate sectors:-

- Unaccountable social costs and benefits: Cost of water pollution cannot be measured properly and hence, it is difficult to incorporate such data into national account. Lack of appropriate measures and standardized tools of measures environmental aspects.
- Limited data availability: Limited environmental data is available for measurement hence, which does not find their place in the national account. Data is outdated which estimate wrong and figures and conclusions.
- Cost of conducting environmental measurement: Measuring environmental aspects is monetary terms is more important but practically due to less data no uniformity with regards to standard.
- Lack of coordination: Lack of coordination between different Government Ministries such as finance, environment Statistical and Labour.

- Different types of Companies: Various types of industries available in a country caused different types of environmental impacts.

Environmental accounting needs to work as a tool to measure the economic efficiency of the business activities co company as a whole. It is accounting for any costs and benefits that arise from change to a company's products and processes where the change also involves a change in environment.



Source: www.env.go.jp.in

Practice of Corporate Environmental Accounting in India:

Environmental Accounting needs to work as a tool to measure the economic efficiency of environmental conservation activities and environmental efficiency of the business activities of company as whole.

Forms of Environmental Accounting in India-

- A) Environmental Management Accounting
- B) Environmental Financial Accounting
- C) Environmental National Accounting

The Environment Ministry has issued instructions in this regards to prepare environmental statement. It is mandatory for all the industrial units to submit an environmental statement to the concern state pollution boards consents to operate under the relevant environmental norms. It requires including in Directors Reports related to environmental policies, problems and annexure showing details of energy consumption as energy conservation. Waste water and production process waste. Very few corporations give adequate information regarding environment issue. The various laws relevant to environment protection are as under-

- 1) Water Prevention and Control of Pollution Act. 1974
- 2) Water Prevention and Control of Pollution Cess Act. 1977
- 3) The Air Prevention and Control of Pollution Act 1991
- 4) The Forest Conservation Act. 1980
- 5) Environment Protection Act. 1986

It is important that all new projects require environmental clearance. This clearance concerns both the Union Ministry of Environment and Forest and the corresponding State Government department of Environment. A Central Pollution Control Board [CPCB] has been set up.

Environment is becoming a much more problem all over the world. It is necessary to find the required level of development and the limit of the environmental degradation. It has been noticed that, the environmental accounting is gaining importance at macro level to micro level. At the macro level

National environment accounting focuses on accounting of natural resources and environmental costs and at micro level, it tries to assess the actual impact on corporate activities.

Environment disclosure as contained in the Annual Reports of selected five Indian companies-

Godrej Industries Ltd: Annual Report 2015-16

Godrej Industries Ltd [GIL] part of the larger Godrej Groups shares the groups vision for playing an active part in creating a more inclusive and greener India. Implementation of innovative projects reduces the specific energy consumptions. Efforts for energy consumption have resulted in reducing the specific energy consumption. In the last six years, GIL reduces specific energy by 24% and water consumption by 25%. GIL treats waste water in their water treatments plants and reuses the same. GIL has also reduced raw water consumption by installing condensate recovery systems that recovers the condensate and reuse it in the process. GIL also exploring waste to energy technologies to process the industrial waste. Specific waste to landfill has reduced by 74%. From the baseline in the year 2015. GIL is listed as a leader in CDP India's climate disclosure leadership category index second time in a row and got energy efficient and innovation awards 2016. GIL displays adequate information to enable sale and effective usage of its products.

Hindustan Unilever Limited Report 2015-16

Company strives to grow the business whilst reducing environment footprint and increasing positive social impact. Company has taken ambitious targets of year-on-year reductions 49% in CO₂ emissions and waste generation in its operations. Water consumption in cubic meter per tonne of production, reduced by 53% as compared to 2008 baseline and by 9% over 2015. Bio-gas plants for utilisation of canteen waste for gas generation were installed in five factories. Total waste generated from the factories reduced by 21.5% in 2016 as compared to 2015. Company maintained the status of zero non-hazardous waste to landfill from all factories and offices.

Bharat Electronic Ltd[BHL]: Annual Report 2015-16

In all the units of BHL, practicing of conservation, water conservation of natural resources like energy conservation, water conservation and reduction in waste generation is included as a routine approach. BHL looks beyond the opportunities available for improvising the performance against environmental commitments. Company has integrating sustainability in its operations systematically with best practices.

Nestle India Ltd: Annual Report 2015-16

Nestle India Ltd has consistently emphasized sustainable use of natural resources and non-renewable resources within the factories and in areas under the control. There is a continuous effort to maximize production while minimizing the consumption of natural resources and reducing waste and emission. In the last 15 years company reduced water uses by 53% and waste water by 55% per tonne of production across their eight factories. Company have reduced energy usage by 47% and emissions by 55% per tonne if production across their eight factories in India.

Havells India Ltd. Annual Report 2015-16

Havells India Ltd. having rainwater harvesting facilities in all plants. Reduced water consumption in all plants of the company. Reduced water consumption by 50,000 KL across all plants. Company adopted LED lighting in all plants. Reduce use of hazardous materials in packing and process by 20%. e.g. Thermocal, Silicon spray etc. Reduced wood consumption in packaging. Adoption of bio-fuels at five Plants. Optimisation of logistics resulting in reduced miles and costs.

Limitation of the study:

1. The study is based on the secondary data.
2. The Study has considered 5 manufacturing companies only.
3. The data of the corporate environment accounting is only available from the annual reports of the selected companies for analysis.
4. There is no standard accounting method for comparison between two companies. Input for environmental accounting is not easily available because costs and benefits relevant to the environment are not easily measurable.

Findings and suggestions:

From the above analysis the findings can be summarized in the following points-

- Extent of environmental accounting in various industries is different.
- Comparison between two companies or two countries is not possible if method of accounting is different.
- Corporate Environment Accounting is a long process. Therefore, to draw a conclusion with the help of it is not easy.
- Environment Accounting cannot work independently. It should be integrated with the financial accounting which not easy.
- Environment Accounting analysed along with other aspects of accounting because costs and benefits related to the environment itself depend upon the results of the financial accounting, management accounting, cost accounting, tax accounting and national accounting
- Input for Environment Accounting is not easily available because costs and benefits relevant to the environment are not easily measurable.

Suggestions:

- A Separate environmental statement should be prepared showing investment in the various equipment for pollution control along with benefits to the environment from such equipments; such a benefits should be measured either in quantity or money.
- Need of preparation of short term as well as long term budget for both revenue and capital nature.
- Environment Accounting will remain as compliance of applicable rules and regulations unless it is not well planned and approved by the top authority.
- Environmental aspects should be evaluated systematically and should be disclosed in the financial statements of the company.
- 'Prevention is better than cure' policy should be adopted by the corporate sectors for the prevention of environment and economic development.

Conclusion:

Environment Accounting is a preliminary stage in India and whatever shows in the account in this regards is more or less compliance of relevant rules and regulations in the Act. A well defined environmental policy as well as proper follows up and proper accounting procedure is necessary. Unless common people of India are not made aware about the environmental safety, development of accounting in this regard is a little doubtful. Corporate should prepare a firm environmental policy and take steps for pollution control rules and regulations. Mentionadequate and real information regarding the details of environment aspects in the annual statement for sustainable and economic development of the country.

References:

- Sonia Kundra [2013] 'Environmental Disclosure Practices by companies in India: A study of Nifty companies' *Pacific Business Review International* vol. 6 Issue 2.
- Mukesh Chauhan 2005 'Concept of Environmental Accounting and Practices in India.'
- Taxmanns 'Accounting Standards and Corporate Accounting Practices' by T.P. Ghoshm1998.
- www.scribd.com
- www.env.go.jp.in
- www.nestle.in
- www.havells.com
- www.bel-india.
- www.hul.co.in
- www.godrejindustries.com